

## Title (en)

MACROPOROUS, RESORBABLE AND INJECTIBLE CALCIUM PHOSPHATE-BASED CEMENTS (MCPC) FOR BONE REPAIR, AUGMENTATION, REGENERATION, AND OSTEOPOROSIS TREATMENT

## Title (de)

MAKROPORÖSE, RESORBIERBARE UND INJIZIERBARE ZEMENTE AUF CALCIUMPHOSPHATBASIS (MCPC) FÜR KNOCHENREPARATUR, VERSTÄRKUNG, REGENERATION UND OSTEOPOROSE-BEHANDLUNG

## Title (fr)

CIMENTS OSSEUX A BASE DE PHOSPHATE DE CALCIUM POUR REPARATION, AUGMENTATION, ET REGENERATION OSSEUSE, ET TRAITEMENT DE L'OSTEOPOROSE

## Publication

**EP 1761472 A4 20100120 (EN)**

## Application

**EP 05713191 A 20050210**

## Priority

- US 2005004084 W 20050210
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## Abstract (en)

[origin: US2005199156A1] A composition and method for producing interconnective macroporous, resorbable and injectable calcium phosphate-based cements (MICPCs). The composition of the invention sets to poorly crystalline apatitic calcium phosphate after mixing a powder component and an aqueous solution. The multiphasic calcium phosphate components in the cement resorb at different rates allowing the timely replacement by new bone. The interconnected macroporosity in the cement allows for vascularization, entrapment of growth factors, cell colonization and tissue ingrowth. This MICPC can be used for dental and medical applications relating to bone repair, augmentation, reconstruction, regeneration, and osteoporosis treatment, and also for drug delivery, and as scaffolds for tissue engineering.

## IPC 8 full level

**C04B 12/02** (2006.01); **A61L 24/02** (2006.01); **A61L 27/12** (2006.01); **C04B 28/34** (2006.01)

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## Citation (search report)

- [A] WO 03093196 A1 20031113 - MERCK PATENT GMBH [DE], et al
- [A] WO 0141824 A1 20010614 - ROBERT MATHYS STIFTUNG [CH], et al
- [A] US 5782971 A 19980721 - CONSTANTZ BRENT R [US], et al
- [A] US 5683461 A 19971104 - LEE DOSUK D [US], et al
- [A] WO 0236518 A1 20020510 - HOWMEDICA OSTEONICS CORP [US]
- [A] WO 0045867 A1 20000810 - MATHYS ROBERT STIFTUNG [CH], et al
- [A] JP H0523387 A 19930202 - MITSUBISHI MATERIALS CORP
- See references of WO 2005077049A2

## Designated contracting state (EPC)

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## DOCDB simple family (publication)

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